植 物 分 类 学 报 40(2):154~158(2002)
Acta Phytotaxonomica Sinica

广西茜草科植物三新种

[1]方 鼎 [2]谢志明
[1](广西中医药研究所 南宁 530022) [2](广西自然博物馆 南宁 530012)

Three new species of the Rubiaceae from Guangxi, China

[1]FANG Ding [2]XIE Zhi-Ming
[1](*Guangxi Institute of Traditional Medical & Pharmaceutical Sciences*, Nanning 530022)
[2](*Guangxi Museum of Natural History*, Nanning 530012)

Key words Rubiaceae; *Spiradiclis napoensis* D. Fang et Z. M. Xie; *Ophiorrhiza huanjiangensis* D. Fang et Z. M. Xie; *Mussaenda caudatiloba* D. Fang; New species; Guangxi; China
关键词 茜草科; 那坡螺序草; 环江蛇根草; 尾裂玉叶金花; 新种; 广西; 中国

1 那坡螺序草 新种 图1: 1~3

Spiradiclis napoensis D. Fang et Z. M. Xie, sp. nov. Fig. 1: 1~3

Affinis *S. howii* H. S. Lo, quae foliorum laminis saepe lanceolatis in sicco subtus fulvescentibus, stipulis et bracteolis brevioribus, in fl. longistylatis: corolla extra 5-fariam hirsutula, lobis dorso anguste alatis, staminibus medio tubi insertis, in fl. brevistylatis: corollae tubo intra ubique albo-villoso differt.

Herba eramosa, ca. 65 cm longa, adscendens, inferne ad nodos radicans. Caulis in sicco subplano-compressus, inconspicue tetragonus, 1~3 mm diam., plus minusve curve pubescens juventute densius, internodiis 0.4~12.5 cm longis. Folia prope apicem caulis opposita et media saepe decidua, in paribus subaequalia; laminae tenuiter chartaceae vel submembranaceae, anguste vel late ovatae, 4~7 cm longae, 1.5~3.5 cm latae, apice acuminatae, basi rotundae vel late cuneatae, leviter decurrentes, margine aliquanto undulatae, supra atro-virentes, pilosulae, subtus pallidae, secus costas nervosque curve pubescentes vel utrinque glabrescentes, nervis lateralibus utrinsecus 8~10 cum costis supra subcomplanis subtus prominulis; petioli 0.7~2 cm longi, supra subcanaliculati, eodem indumento caulis obtecti; stipula lineari-subulata, 5~8 mm longa, glabra, bilobata, lobis ca. 1 mm longis. Cyma terminalis, ca. 8~10-flora; pedunculus 3~5 mm longus, eodem indumento caulis obtectus; rami 1~4 mm longi, farinoso-puberuli; bracteolae lineares, 6~10 mm longae, glabrae; flos dimorphus heterostylus; fl. brevistylatus: calycis tubus ellipsoideus, ca. 2 mm altus, inconspicue 10-costatus, farinoso-puberulus raro subglabratus, lobis 5 anguste triangulatis 2.5 mm longis 1-nerviis subglabratis, glandula una interjectis; corolla (alab.) ca. 17 mm longa, alba erubescenti-suffusa, extus glabra, intus ad faucem annulo pilorum densorum alborum villosorum ornata, tubo subtubiformi ca. 12 mm longo 1.5~2 mm crasso, lobis 5 subovatis ca. 5 mm longis 2 mm latis acutis; stamina 5 ad faucem inserta, exserta, filamentis 1 mm longis, antheris linearibus 2.5 mm longis; discus annularis, 0.7~1 mm altus, 4-lobatus; ovarium biloculare, in quoque loculo ovulis numerosis, stylo ca. 1 mm longo glabro, stigmate complano 3 mm longo 1 mm

2001-03-09 收稿, 2001-09-17 收修改稿。

lato 2-lobo, lobis anguste ovato-triangulatis 1 mm longis acuminatis. Fl. longistylatus: calyx et corolla eis florum brevistylorum similis, staminibus prope basin corollae insertis, inclusis, stylo 8 mm longo in medio sparse puberulo, stigmate 3 mm longo 2 mm lato 2-lobo, lobis 1.5 mm longis late oblongis apice obtusis. Capsula non visa.

China. Guangxi (广西): Napo (那坡), Baidu (百都), Nonghua (弄化), limestone hill, valley, in forests, rare, alt. ca. 1000 m, 1991-04-18, L. Zeng, L. S. Zhou & Z. M. Xie (曾玲、周丽双和谢志明) 1109 (holotype, here designated, GXMI; isotype, GXNM).

不分枝的草本,长约65 cm,上升,下部节上生根。茎干时稍压扁,不明显的四角形,直径1~3 mm,多少被弯的柔毛,嫩时较密,节间长0.4~12.5 cm。叶生于近茎梢,中部的常凋落,同对叶近等大;叶片簿纸质至近膜质,狭卵形至阔卵形,长4~7 cm,宽1.5~3.5 cm,先端渐尖,基部圆形至宽楔形,稍下延,边缘微波状,上面暗绿色,被小疏柔毛,下面苍白色,沿中脉和侧脉被弯的柔毛,或两面变近无毛,侧脉每边8~10条,连中脉在上面近扁平,下面稍隆起;叶柄长0.7~2 cm,上面具浅槽,毛被同茎;托叶线状钻形,长5~8 mm,2浅裂,裂片长约1 mm,无毛。聚伞花序顶生,有花约8~10朵;总花梗长3~5 mm,毛被同茎;分枝长1~4 mm,被粉状微毛;小苞片线形,长6~10 mm,无毛。花二型。短柱花:萼管椭圆状,高约2 mm,有不明显的10条直棱,被粉状微毛,稀近无毛,裂片5,狭三角形,长2.5 mm,具1脉,近无毛,裂片间有1枚小腺体;花冠(蕾)长约17 mm,白染红色,外面无毛,内面喉部饰有一圈密的白色长柔毛环,管近管状,长约12 mm,粗1.5~2 mm,裂片5,近卵形,长约5 mm,宽约2 mm,先端急尖;雄蕊5,生于花冠喉部,伸出,花丝长1 mm,花药线形,长2.5 mm;花盘环状,高0.7~1 mm,4浅裂;子房2室,每室有胚珠多数,花柱长约1 mm,无毛,柱头扁平,长3 mm,宽1 mm,2裂,裂片狭卵状三角形,长1 mm,渐尖。长柱花:花萼与花冠同短柱花;雄蕊生于花冠内面近基部,内藏;花柱长8 mm,中部散生微毛,柱头长3 mm,宽2 mm,2裂,裂片宽长圆形,长1.5 mm,先端钝。蒴果未见。花期4~5月。

本种与宽昭螺序草 *S. howii* Lo 相近,但那种叶常为披针形,干时下面常变黄色,托叶和小苞片均较短,长柱花的花冠外面有5列短硬毛,裂片背面有狭翅,雄蕊生于冠管的近中部,短柱花的花冠内面全被长柔毛。

2 环江蛇根草 新种 图1:4~5

Ophiorrhiza huanjiangensis D. Fang et Z. M. Xie, sp. nov. Fig. 1: 4~5

A *O. nigricanti* Lo foliorum nervis lateralibus utrinque inconspicuis, petiolis brevioribus 1.5~5 mm longis, inflorescentia 1-, raro 3-flora haud condensata, pedunculis eramosis, floribus siccitate non nigricantibus differt.

Herba multiramea, ca. 23 cm longa, decumbens, inferne ad nodos radicans. Ramus gracilis in vivo purpureus, plus minusve curve pubescens juventute densius, internodiis 1~4 cm longis. Folia opposita, subinaequalia; laminae chartaceae, ovatae raro late ovatae et rotundae, 5~18.5 mm longae, 4~12 mm latae, apice acutae, basi rotundatae raro subcordatae et obtusae, margine integrae, supra olivaceae, glabrae vel fere glabrae, subtus subflavo-virentes, secus costas sparse curve pubescentes, costis utrinque subcomplanis, nervis lateralibus utrinsecus ca. 3~4 utrinque inconspicuis; petioli 1.5~5 mm longi, supra canaliculati, eodem indumento rami obtecti; stipula caduca. Inflorescentia terminalis, 1-, raro 3-flora; pedunculus 10 mm longus, eodem indumento rami obtectus; fl. brevistylatus: bracteae lineares, 1.3~2 mm longae, sparse farinoso-puberulae;

bracteolae oblongae vel subfalcatae, vix 1.5 mm longae, sparse farinoso-puberulae; calycis tubus turbinatus, 1.5 mm altus, sparse farinoso-puberulus, lobis 5 saepe ovatis ca. 1 mm longis obtusis fere glabris; corolla alba, tubo 10 ~ 12 mm longo basi 1.5 mm lato apicem versus sensim dilatato extus glabro intus sparse albo-puberulo, lobis 5 ovatis 4 ~ 5 mm longis acutis utrinque glabris margine sparse inconspicue ciliolatis; stamina 5, parti superna tubi corollae inserta, filamentis 0.6 mm longis glabris, antheris oblongis 1 mm longis; discus 2-partitus; ovarium 2-loculare, quoque loculo ovulis numerosis, stylo 1.5 mm longo incluso glabro, stigmate complano 2-lobo, lobis linearibus 1.8 mm longis. Fl. longistylus et capsula ignota.

China. Guangxi (广西): Huanjiang (环江), Mulun (木论), on grassy places, 1978-04-15, H. W. Mo (莫汉武) 4-3-410 (holotype, here designated, GXMI).

多枝草本,长约 23 cm, 外倾,下部节上生根。枝纤细,鲜时紫红色,多少被弯的短柔毛,嫩时较密,节间长 1 ~ 4 cm。叶对生,稍不等大;叶片纸质,卵形,稀阔椭圆形和近圆形,长 5 ~ 18.5 mm,宽 4 ~ 12 mm,先端急尖,基部圆形稀浅心形和钝,边全缘,上面榄绿色,无毛或几乎无毛,下面浅黄绿色,沿中脉散生弯的短柔毛,中脉两面近扁平,侧脉每边约 3 ~ 4 条,两面不明显;叶柄长 1.5 ~ 5 mm, 上面具槽,毛被同枝;托叶早落。花序顶生,单花稀 3 花;总花梗长 10 mm,毛被同枝;苞片线形,长 1.3 ~ 2 mm,散生粉状微毛;小苞片长圆形或近镰形,长不足 1.5 mm,散生粉状微毛。短柱花:花萼管陀螺形,高 1.5 mm,散生粉状微毛,裂片 5,常卵形,长约 1 mm,先端钝,几乎无毛;花冠白色,管长 10 ~ 12 mm,基部宽 1.5 mm,向上稍渐增粗,外面无毛,内面中部向上散生白色微毛,裂片 5,卵形,长 4 ~ 5 mm,急尖,两面无毛,边缘散生不明显的细睫毛;雄蕊 5,在花冠管上部贴生,花丝长 0.6 mm,无毛,花药长圆形,长 1 mm;花盘 2 全裂;子房 2 室,胚珠在每室多数,花柱长 1.5 mm,内藏,无毛,柱头扁平,2 裂,裂片线形,长 1.8 mm。长柱花和果实未见。花期 4 月。

本种叶的侧脉两面不明显,叶柄较短,长 1.5 ~ 5 mm,花序具 1 花稀 3 花,绝不紧缩,花序梗不分枝,花干时不变黑,而不同于变黑蛇根草 *O. nigricans* Lo.

3 尾裂玉叶金花 新种 图 1: 6 ~ 7

Mussaenda caudatiloba D. Fang, sp. nov. Fig. 1: 6 ~ 7

Species *M. longipetalae* H. L. Li similis, quae foliorum laminis oblongo- vel elliptico-ovatis, stipula caduca, calycis lobis normalibus 6 ~ 8 mm longis, corollae tubo ca. 3 cm longo, lobis lanceolatis 12 mm longis, stylo apice vix lobato differt.

Frutex erectus vel scandens. Ramus teres, retrorsus vel subpatens fumeo-villosus juventute densius. Folia opposita, subaequalia raro inaequalia; laminae tenuiter chartaceae, ovatae vel anguste ovatae, 4 ~ 11 cm longae, 2 ~ 5 cm latae, saepe subinaequilaterae, apice acuminatae plus minusve caudatae, basi rotundae raro cordatae, acutae obtusaeve, integrae, supra atro-virentes, subtus canae, utrinque subadpresso-villosae, ad costam utrinque et nervos subtus densius, nervis lateralibus 6 ~ 9-jugatis curvato-adscendentibus subtus prominulis; petioli 5 ~ 10 mm longi, eodem indumento rami obtecti; stipula 2-partita, lobis lineari-subulatis 7 ~ 10 mm longis villosis persistentibus. Cymae 2 ~ 3, terminales, compactae; pedunculi 5 ~ 10 mm longi, dense patentes cano-villosi; bracteola lineari-subulata, ca. 8 mm longa, extus villosa. Flores aurei, sessiles. Calycis tubus turbinatus, 2.5 mm longus, dense patenterque villosus, lobis normalibus 4 vel 5 lineari-subulatis 10 ~ 13 mm longis extus villosis , interdum lobo petaloideo albescenti ovato 5 ~ 6.7 cm longo 3 ~

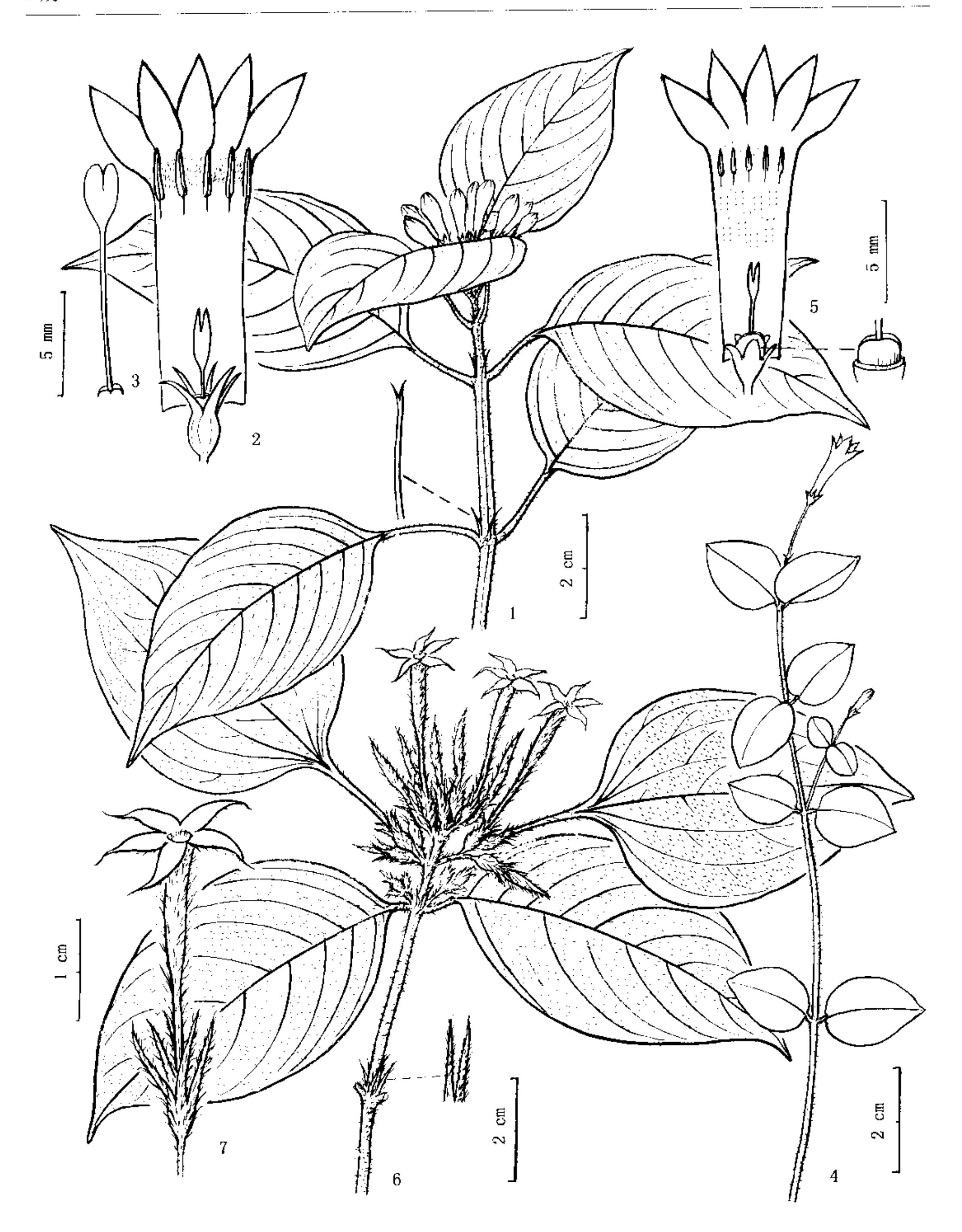


图1　1~3. 那坡螺序草　1. 花枝；2. 短柱花花冠剖开和花萼，示雄蕊和雌蕊；3. 长柱花花柱和柱头。　4~5. 环江蛇根草　4. 花枝；5. 短柱花花冠剖开和花萼，示雄蕊和雌蕊。6~7. 尾裂玉叶金花　6. 花枝；7. 花。(廖信佩 绘)

Fig. 1　1~3. *Spiradiclis napoensis* D. Fang et Z. M. Xie　1. Flowering branch; 2. Corolla opened and calyx of short-styled flower with stamens and pistil; 3. Style and stigma of long-styled flower. 4~5. *Ophiorrhiza huanjiangensis* D. Fang et Z. M. Xie　4. Flowering branch; 5. Corolla opened and calyx of short-styled flower with stamens and pistil. 6~7. *Mussaenda caudatiloba* D. Fang　6. Flowering branch; 7. Flower.

4.3 cm lato apice acuto basi rotundo raro asymmetrico integro longitudinaliter 5 ~ 8-nervio utrinque adpresso-villoso, stipite 1.8 ~ 2.5 cm longo dense et patenter fumeo-villoso. Corollae tubus 25 mm longus, 1 mm crassus, e medio ad faucem ampliatus, extus patenter cineraceo-villosus, intus ad amplificationem dense clavato-puberulus, lobis 5 anguste triangulato-ovatis 8 mm longis basi 1.5 ~ 2.5 mm latis apice caudatis extus villosis intus dense verruculatis. Stamina 5, medio tubi corollae affixa, filamentis 0.5 mm longis glabris, antheris linearibus 4.5 mm longis basi sagittatis. Discus annulatus, 0.2 mm altus. Stylus 5 mm longus glaber; stigma 2-lobum, lobis linearibus 3 mm longis glabris. Fructus ignotus.

China. **Guangxi** (广西): Napo (那坡), Delong (德隆), in thickets, 1967-05-13, X. X. Chen & Y. Wan (陈秀香,万煜) 21879 (holotype, here designated, GXMI); the same locality, Napo Exped. (那坡队) 3-50996 (GXMI).

直立或攀援灌木。枝圆柱形,被倒向或近开展的烟灰色长柔毛,幼时较密。叶对生,近等大稀不等大;叶片薄纸质,卵形至狭卵形,长 4 ~ 11 cm,宽 2 ~ 5 cm,两侧常稍不相等,先端渐尖,多少尾状,基部圆形稀浅心形、急尖或钝,边全缘,上面暗绿色,下面苍灰色,两面被近贴伏的长柔毛,在中脉两面和侧脉下面较密,侧脉 6 ~ 9 对,弧形上升,下面稍隆起;叶柄长 5 ~ 10 mm,毛被同枝;托叶 2 全裂,裂片线状钻形,长 7 ~ 10 mm,被长柔毛,不早落。聚伞花序 2 ~ 3,顶生,紧密;花序梗长 5 ~ 10 mm,密被开展的烟灰色长柔毛;小苞片线状钻形,长约 8 mm,外被长柔毛。花金黄色,无梗;花萼管陀螺形,长 2.5 mm,密被开展的长柔毛,正常的裂片 4 或 5,线状钻形,长 10 ~ 13 mm,外被长柔毛,有时 1 枚瓣状裂片白色,卵形,长 5 ~ 6.7 cm,宽 3 ~ 4.3 cm,先端急尖,基部圆形稀不对称,全缘,具纵脉 5 ~ 8 条,两面被贴伏的长柔毛,柄长 1.8 ~ 2.5 cm,密被开展的烟灰色长柔毛;花冠管长 25 mm,粗 1 mm,自中部向喉部增粗,外被开展的浅灰色长柔毛,内面在增粗处密被捧状毛,裂片狭三角状卵形,长 8 mm,基部宽 1.5 ~ 2.5 mm,先端尾状,外被长柔毛,内面密生细疣突;雄蕊 5,生于冠管中部,花丝长 0.5 mm,无毛,花药线形,长 4.5 mm,基部箭头形;花盘环状,高 0.2 mm;花柱长 5 mm,无毛,柱头 2 裂,裂片线形,长 3 mm,无毛。果实未见。花期 5 月。

本种与越南北部的 *M. longipetala* Li 接近,但后者叶片长圆状卵形或椭圆状卵形,托叶早落,正常的萼裂片长 6 ~ 8 mm,花冠管长约 3 cm,裂片披针形,长 12 mm,花柱先端几不浅裂。

致谢 感谢韦毅刚先生、邓云飞先生热情提供部分参考文献。

(责任编辑 徐 黎)